CLAIMS

I claim:

1. A disk enclosure comprising:

a first group of one or more power sources implementing a first power domain;

a first plurality of elements powered by the first group of power sources;

a second group of one or more power sources implementing a second power domain; and

a second plurality of elements powered by the second group of power sources.

2. The disk enclosure of claim 1, wherein the first plurality of elements includes at least one of a temperature sensor , a memory, and a backplane controller.

3. The disk enclosure of claim 2, wherein the backplane controller is coupled to a port bypass circuit, the port bypass circuit operable to bypass an element in the first plurality of elements.

4. The disk enclosure of claim 3, wherein the bypassed element is a disk drive.

5. The disk enclosure of claim 1, further comprising:

a first voltage circuit coupled to the first group of power sources and the second group of power sources, the first voltage circuit operable to generate a first voltage; and

a second voltage circuit coupled to the first group of power sources and the second group of power sources, the second voltage circuit operable to generate a second voltage;

6. The disk enclosure of claim 5, wherein the first voltage circuit and the second voltage circuit are similarly implemented.

7. The disk enclosure of claim 5, wherein the first voltage circuit comprises:

a first diode connected to the first group of power sources;

a second diode connected to the second group of power sources;

a first fuse coupled between the first diode and an output terminal of the first voltage circuit; and

a second fuse coupled between the second diode and the output terminal of the first voltage circuit.

8. The disk enclosure of claim 1, wherein the first group of one or more power sources comprises at least one power supply.

9. The disk enclosure of claim 8, wherein the first group of one or more power sources further comprises at least one backup battery.

10. A disk enclosure comprising:

a first plurality of elements;

a second plurality of elements;

a first group of one or more power sources;

a second group of one or more power supplies;

a first voltage circuit operable to generate a first shared voltage from the first and the second groups of one or more power supplies, the first shared voltage supplied to the first plurality of elements; and

a second voltage circuit operable to generate a second shared voltage from the first and the second groups of one or more power sources, the shared second voltage supplied to the second plurality of elements.

11. The disk enclosure of claim 10, wherein the first voltage circuit and the second voltage circuit are similarly implemented.

12. The disk enclosure of claim 10, wherein the first voltage circuit comprises:

a first diode connected to the first group of power sources;

a second diode connected to the second group of power sources;

a first fuse coupled between the first diode and an output terminal of the first voltage circuit; and

a second fuse coupled between the second diode and the output terminal of the first voltage circuit.

13. The disk enclosure of claim 10, wherein the first and the second pluralities of elements each includes at least one of a transceiver, a repeater, a memory, and an enclosure controller.

14. The disk enclosure of claim 10, wherein the first and the second pluralities of elements each includes at least one of a backplane controller, a port bypass circuit, a temperature sensor, and a memory.